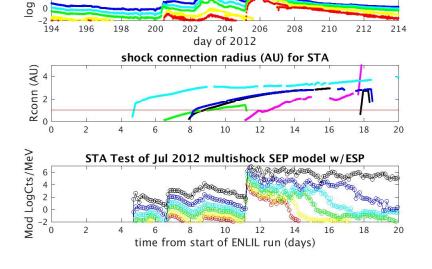
Modeling SEP Events With ENLIL and SEPMOD

LWS TIM Meeting update April 2017

STEREO A 2012 07 -EUVI: 20 36/15

COR1: 2040.00



LET(2-10MeV),HET(15-100MeV), Jul 2012 STA

(km/s)

(\$\frac{2200}{1700} 1200

00

>

 $Lat = 4.83^{\circ}$

2012-07-20T18:00

Ecliptic Plane

200 550 900 1250 1600

flux

2012-07-12T00 + 8.75 days

STEREO A

STEREO B

2012-07 / 2012-08 CME measur

HELIO WEATHER

Progress toward routine SEP modeling using ENLIL with SEPMOD*:

- -Continued to exercise SEPMOD on available ENLIL runs for which SEPMOD files have been produced (those generated by Leila Mays, with several now posted on the CCMC runs results web 'archive')
- -Documented six cases of SEPMOD results based on ENLIL runs simulating several weeks duration each (manuscript submitted to 'Space Weather', now under revision).
- -Presented talks featuring SEPMOD results at Fall 2016 AGU and recent 2017 AIAC meeting. Will present another at Exeter IAU.
- -Transferred a test version of the SEPMOD code to Leila Mays for testing at CCMC.

^{*}submitted by Col J. Luhmann, May 2017

Plans for LWS task completion and longer term:

- -Continue to work with Leila Mays on CCMC testing, provide feedback on related user interfaces
- -Continue to test SEPMOD on any new ENLIL cases run with needed outputs, including wider planetary and heliospheric applications (e.g. to MAVEN SEP observations).
- -Seek additional support to test and upgrade SEPMOD, and in addition provide mentoring on complementary AFRL effort by Christina Lee (SSL) (funded by AFOSR young scientist program).